

SEQUENCE LISTING

<110> Wang, Chang Yi

<120> Immunogenic peptide composition as vaccines for the prevention and treatment of Alzheimer's Disease

<130> 1151-4167

<140> TBA

<141> 2001-5-25

<160> 76

<170> PatentIn Ver. 2.0

<210> 1

<211> 15

<212> PRT

<213> Hepatitis B virus

<400> 1

Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
1 5 10 15

<210> 2

<211> 30

<212> PRT

<213> Bordetella pertussis

<400> 2

Lys Lys Leu Arg Arg Leu Leu Tyr Met Ile Tyr Met Ser Gly Leu Ala
1 5 10 15

Val Arg Val His Val Ser Lys Glu Glu Gln Tyr Tyr Asp Tyr
20 25 30

<210> 3

<211> 17

<212> PRT

<213> Clostridium tetani

<400> 3

Lys Lys Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu
1 5 10 15

Leu

<210> 4

<211> 22

<212> PRT

<213> Clostridium tetani

"4629360"

<400> 4
Lys Lys Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys
1 5 10 15

Val Ser Ala Ser His Leu
20

<210> 5
<211> 15
<212> PRT
<213> Bordetella pertussis

<400> 5
Tyr Met Ser Gly Leu Ala Val Arg Val His Val Ser Lys Glu Glu
1 5 10 15

<210> 6
<211> 27
<212> PRT
<213> Clostridium tetani

<400> 6
Tyr Asp Pro Asn Tyr Leu Arg Thr Asp Ser Asp Lys Asp Arg Phe Leu
1 5 10 15
Gln Thr Met Val Lys Leu Phe Asn Arg Ile Lys
20 25

<210> 7
<211> 24
<212> PRT
<213> Pertusaria trachythallina

<400> 7
Gly Ala Tyr Ala Arg Cys Pro Asn Gly Thr Arg Ala Leu Thr Val Ala
1 5 10 15
Glu Leu Arg Gly Asn Ala Glu Leu
20

<210> 8
<211> 15
<212> PRT
<213> Measles virus

<400> 8
Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
1 5 10 15

<210> 9
<211> 20
<212> PRT

[illegible]

Thr Glu Ser Tyr
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Thr

Ile Leu Pro Gly His Gly Cys
20

<210> 14
 <211> 39
 <212> PRT
 <213> Diphtheria

<400> 14
 Glu Glu Ile Val Ala Gln Ser Ile Ala Leu Ser Ser Leu Met Val Ala
 1 5 10 15
 Gln Ala Ile Pro Leu Val Gly Glu Leu Val Asp Ile Gly Phe Ala Ala
 20 25 30
 Thr Asn Phe Val Glu Ser Cys
 35

<210> 15
 <211> 21
 <212> PRT
 <213> Plasmodium falciparum

<400> 15
 Asp His Glu Lys Lys His Ala Lys Met Glu Lys Ala Ser Ser Val Phe
 1 5 10 15
 Asn Val Val Asn Ser
 20

<210> 16
 <211> 17
 <212> PRT
 <213> Schistosoma mansoni

<400> 16
 Lys Trp Phe Lys Thr Asn Ala Pro Asn Gly Val Asp Glu Lys His Arg
 1 5 10 15
 His

<210> 17
 <211> 14
 <212> PRT
 <213> Escherichia coli

<400> 17
 Gly Leu Gln Gly Lys His Ala Asp Ala Val Lys Ala Lys Gly
 1 5 10

<210> 18
 <211> 19
 <212> PRT

<213> Escherichia coli

<400> 18

Gly Leu Ala Ala Gly Leu Val Gly Met Ala Ala Asp Ala Met Val Glu
1 5 10 15

Asp Val Asn

<210> 19

<211> 20

<212> PRT

<213> Escherichia coli

<400> 19

Ser Thr Glu Thr Gly Asn Gln His His Tyr Gln Thr Arg Val Val Ser
1 5 10 15

Asn Ala Asn Lys
20

<210> 20

<211> 20

<212> PRT

<213> Hepatitis B virus

<400> 20

Ser Asp Phe Phe Pro Ser Val Arg Asp Leu Leu Asp Thr Ala Ser Ala
1 5 10 15

Leu Tyr Arg Glu
20

<210> 21

<211> 12

<212> PRT

<213> Chlamydia trachomatis

<400> 21

Thr Ile Asn Lys Pro Lys Gly Tyr Val Gly Lys Glu
1 5 10

<210> 22

<211> 15

<212> PRT

<213> Measles virus

<400> 22

Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
1 5 10 15

<210> 23

<211> 16
 <212> PRT
 <213> Measles virus

<400> 23
 Asp Leu Ser Asp Leu Lys Gly Leu Leu Leu His Lys Leu Asp Gly Leu
 1 5 10 15

<210> 24
 <211> 16
 <212> PRT
 <213> Measles virus

<400> 24
 Glu Ile Ser Glu Ile Arg Gly Ile Ile Ile His Arg Ile Glu Gly Ile
 1 5 10 15

<210> 25
 <211> 16
 <212> PRT
 <213> Measles virus

<400> 25
 Asp Val Ser Asp Val Lys Gly Val Val Val His Lys Val Asp Gly Val
 1 5 10 15

<210> 26
 <211> 16
 <212> PRT
 <213> Measles virus

<400> 26
 Asp Phe Ser Asp Phe Lys Gly Phe Phe Phe His Lys Phe Asp Gly Phe
 1 5 10 15

<210> 27
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 27
 Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
 1 5 10 15

<210> 28
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 28
 Met Thr Glu Ile Arg Thr Val Ile Val Thr Arg Met Glu Thr Met
 1 5 10 15

<210> 29
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 29
 Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly Val
 1 5 10 15

<210> 30
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 30
 Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
 1 5 10 15

<210> 31
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 31
 Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr Ile
 1 5 10 15

<210> 32
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 32
 Met Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly Met
 1 5 10 15

<210> 33
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 33
 Leu Thr Glu Met Arg Thr Val Ile Val Thr Arg Met Glu Thr Val
 1 5 10 15

<210> 34
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 34
 Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
 1 5 10 15

<210> 35
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 35
 Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr Ile
 1 5 10 15

<210> 36
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 36
 Met Ser Glu Met Lys Gly Val Ile Val His Lys Met Glu Gly Met
 1 5 10 15

<210> 37
 <211> 15
 <212> PRT
 <213> Measles virus

<400> 37
 Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr Val
 1 5 10 15

<210> 38
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 38
 Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
 1 5 10 15

Ile Leu Phe

<210> 39
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 39
 Ile Ser Met Thr Glu Ile Arg Thr Val Ile Val Thr Arg Met Glu Thr
 1 5 10 15

Met Leu Phe

<210> 40
<211> 19
<212> PRT
<213> Measles virus

<400> 40
Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly
1 5 10 15

Val Leu Phe

<210> 41
<211> 19
<212> PRT
<213> Measles virus

<400> 41
Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
1 5 10 15

Ile Leu Phe

<210> 42
<211> 19
<212> PRT
<213> Measles virus

<400> 42
Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr
1 5 10 15

Ile Leu Phe

<210> 43
<211> 19
<212> PRT
<213> Measles virus

<400> 43
Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly
1 5 10 15

Met Leu Phe

<210> 44

<211> 19
 <212> PRT
 <213> Measles virus

<400> 44
 Ile Ser Met Thr Glu Met Arg Thr Val Ile Val Thr Arg Met Glu Thr
 1 5 10 15
 Val Leu Phe

<210> 45
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 45
 Ile Ser Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr
 1 5 10 15
 Val Leu Phe

<210> 46
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 46
 Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr
 1 5 10 15
 Ile Leu Phe

<210> 47
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 47
 Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
 1 5 10 15
 Ile Leu Phe

<210> 48
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 48

Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr
 1 5 10 15

Ile Leu Phe

<210> 49
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 49
 Ile Ser Met Ser Glu Met Lys Gly Val Ile Val His Lys Met Glu Gly
 1 5 10 15

Met Leu Phe

<210> 50
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 50
 Ile Ser Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr
 1 5 10 15

Val Leu Phe

<210> 51
 <211> 19
 <212> PRT
 <213> Measles virus

<400> 51
 Ile Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr
 1 5 10 15

Ile Leu Phe

<210> 52
 <211> 15
 <212> PRT
 <213> Hepatitis B virus

<400> 52
 Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
 1 5 10 15

<210> 53

<211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 53
 Lys Lys Lys Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser
 1 5 10 15

Leu Asp

<210> 54
 <211> 14
 <212> PRT
 <213> Hepatitis B virus

<400> 54
 Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu
 1 5 10

<210> 55
 <211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 55
 Lys Lys Lys Leu Phe Leu Leu Thr Lys Leu Leu Thr Leu Pro Gln Ser
 1 5 10 15

Leu Asp

<210> 56
 <211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 56
 Arg Arg Arg Ile Lys Ile Ile Thr Arg Ile Ile Thr Ile Pro Leu Ser
 1 5 10 15

Ile Arg

<210> 57
 <211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 57
 Lys Lys Lys Val Arg Val Val Thr Lys Val Val Thr Val Pro Ile Ser
 1 5 10 15

Val Asp

<210> 58
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 58
Lys Lys Lys Phe Phe Phe Phe Thr Lys Phe Phe Thr Phe Pro Val Ser
1 5 10 15

Phe Asp

<210> 59
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 59
Lys Lys Lys Leu Phe Leu Leu Thr Lys Leu Leu Thr Leu Pro Phe Ser
1 5 10 15

Leu Asp

<210> 60
<211> 18
<212> PRT
<213> Hepatitis B virus

<400> 60
Lys Lys Lys Ile Ile Thr Ile Thr Arg Ile Ile Thr Ile Ile Thr Thr
1 5 10 15

Ile Asp

<210> 61
<211> 17
<212> PRT
<213> Hepatitis B virus

<400> 61
Lys Lys Lys Ile Ile Thr Ile Thr Arg Ile Ile Thr Ile Ile Thr Thr
1 5 10 15

Ile

<210> 62

<211> 18
 <212> PRT
 <213> Hepatitis B virus

<400> 62
 Lys Lys Lys Met Met Thr Met Thr Arg Met Ile Thr Met Ile Thr Thr
 1 5 10 15
 Ile Asp

<210> 63
 <211> 16
 <212> PRT
 <213> Hepatitis B virus

<400> 63
 Phe Ile Thr Met Asp Thr Lys Phe Leu Leu Ala Ser Thr His Ile Leu
 1 5 10 15

<210> 64
 <211> 19
 <212> PRT
 <213> Hepatitis B virus

<400> 64
 Lys Lys Lys Phe Ile Thr Met Asp Thr Lys Phe Leu Leu Ala Ser Thr
 1 5 10 15
 His Ile Leu

<210> 65
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 65
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15
 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
 20 25 30
 Gly Leu Met Val Gly Gly Val Val Ile Ala
 35 40

<210> 66
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 66

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys
 20 25

<210> 67
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 67
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His
 1 5 10

<210> 68
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 68
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val
 1 5 10

<210> 69
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 69
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr
 1 5 10

<210> 70
 <211> 45
 <212> PRT
 <213> Hepatitis B virus

<400> 70
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Gly Phe Phe
 20 25 30

Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
 35 40 45

<210> 71
 <211> 30
 <212> PRT
 <213> Measles virus

<400> 71
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Lys Ile Ser Ile Thr Glu
 1 5 10 15
 Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
 20 25 30

<210> 72
 <211> 32
 <212> PRT
 <213> Measles virus

<400> 72
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val Lys Ile Ser Ile
 1 5 10 15
 Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
 20 25 30

<210> 73
 <211> 34
 <212> PRT
 <213> Measles virus

<400> 73
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
 1 5 10 15
 Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile
 20 25 30

Leu Phe

<210> 74
 <211> 48
 <212> PRT
 <213> Measles virus

<400> 74
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
 1 5 10 15
 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Lys Ile Ser Ile
 20 25 30
 Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
 35 40 45

<210> 75
 <211> 34
 <212> PRT
 <213> Measles virus

<400> 75
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
 1 5 10 15
 Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
 20 25 30
 Leu Phe

<210> 76
 <211> 34
 <212> PRT
 <213> Measles virus

<400> 76
 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
 1 5 10 15
 Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr Ile
 20 25 30
 Leu Phe

SEQUENCE LISTING

<110> Wang, Chang Yi

<120> Immunogenic peptide composition as vaccines for the prevention and treatment of Alzheimer's Disease

<130> 1151-4167

<140> TBA

<141> 2001-5-25

<160> 76

<170> PatentIn Ver. 2.0

<210> 1

<211> 15

<212> PRT

<213> Hepatitis B virus

<400> 1

Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
1 5 10 15

<210> 2

<211> 30

<212> PRT

<213> Bordetella pertussis

<400> 2

Lys Lys Leu Arg Arg Leu Leu Tyr Met Ile Tyr Met Ser Gly Leu Ala
1 5 10 15

Val Arg Val His Val Ser Lys Glu Glu Gln Tyr Tyr Asp Tyr
20 25 30

<210> 3

<211> 17

<212> PRT

<213> Clostridium tetani

<400> 3

Lys Lys Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu
1 5 10 15

Leu

<210> 4

<211> 22

<212> PRT

<213> Clostridium tetani

<400> 4

Lys Lys Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys
1 5 10 15

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Val Ser Ala Ser His Leu
20

<210> 5
<211> 15
<212> PRT
<213> Bordetella pertussis

<400> 5
Tyr Met Ser Gly Leu Ala Val Arg Val His Val Ser Lys Glu Glu
1 5 10 15

<210> 6
<211> 27
<212> PRT
<213> Clostridium tetani

<400> 6
Tyr Asp Pro Asn Tyr Leu Arg Thr Asp Ser Asp Lys Asp Arg Phe Leu
1 5 10 15

Gln Thr Met Val Lys Leu Phe Asn Arg Ile Lys
20 25

<210> 7
<211> 24
<212> PRT
<213> Pertusaria trachythallina

<400> 7
Gly Ala Tyr Ala Arg Cys Pro Asn Gly Thr Arg Ala Leu Thr Val Ala
1 5 10 15

Glu Leu Arg Gly Asn Ala Glu Leu
20

<210> 8
<211> 15
<212> PRT
<213> Measles virus

<400> 8
Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
1 5 10 15

<210> 9
<211> 20
<212> PRT
<213> Escherichia coli

<400> 9
Gly Ile Leu Glu Ser Arg Gly Ile Lys Ala Arg Ile Thr His Val Asp
1 5 10 15

Thr Glu Ser Tyr
20

<210> 10
<211> 17
<212> PRT
<213> Clostridium tetani

<400> 10
Trp Val Arg Asp Ile Ile Asp Asp Phe Thr Asn Glu Ser Ser Gln Lys
1 5 10 15

Thr

<210> 11
<211> 16
<212> PRT
<213> Clostridium tetani

<400> 11
Asp Val Ser Thr Ile Val Pro Tyr Ile Gly Pro Ala Leu Asn His Val
1 5 10 15

<210> 12
<211> 25
<212> PRT
<213> Chlamydia trachomatis

<400> 12
Ala Leu Asn Ile Trp Asp Arg Phe Asp Val Phe Cys Thr Leu Gly Ala
1 5 10 15

Thr Thr Gly Tyr Leu Lys Gly Asn Ser
20 25

<210> 13
<211> 23
<212> PRT
<213> Diphtheria

<400> 13
Asp Ser Glu Thr Ala Asp Asn Leu Glu Lys Thr Val Ala Ala Leu Ser
1 5 10 15

Ile Leu Pro Gly His Gly Cys
20

<210> 14
<211> 39
<212> PRT
<213> Diphtheria

<400> 14
Glu Glu Ile Val Ala Gln Ser Ile Ala Leu Ser Ser Leu Met Val Ala
1 5 10 15

Gln Ala Ile Pro Leu Val Gly Glu Leu Val Asp Ile Gly Phe Ala Ala

Trp Val Arg Asp Ile Ile Asp Asp Phe Thr Asn Glu Ser Ser Gln Lys

20

25

30

Thr Asn Phe Val Glu Ser Cys
35

<210> 15
<211> 21
<212> PRT
<213> Plasmodium falciparum

<400> 15
Asp His Glu Lys Lys His Ala Lys Met Glu Lys Ala Ser Ser Val Phe
1 5 10 15

Asn Val Val Asn Ser
20

<210> 16
<211> 17
<212> PRT
<213> Schistosoma mansoni

<400> 16
Lys Trp Phe Lys Thr Asn Ala Pro Asn Gly Val Asp Glu Lys His Arg
1 5 10 15

His

<210> 17
<211> 14
<212> PRT
<213> Escherichia coli

<400> 17
Gly Leu Gln Gly Lys His Ala Asp Ala Val Lys Ala Lys Gly
1 5 10

<210> 18
<211> 19
<212> PRT
<213> Escherichia coli

<400> 18
Gly Leu Ala Ala Gly Leu Val Gly Met Ala Ala Asp Ala Met Val Glu
1 5 10 15

Asp Val Asn

<210> 19
<211> 20
<212> PRT
<213> Escherichia coli

<400> 19

Variable	Mean	SD	Min	Max
Age	38.5	12.5	25	65
Gender	Male	Female	Male	Female
Marital Status	Married	Single	Married	Single
Education	High School	College	High School	College
Occupation	Manager	Worker	Manager	Worker
Income	\$30,000	\$40,000	\$20,000	\$50,000
Health Status	Good	Fair	Good	Fair
Stress Level	Low	High	Low	High
Life Satisfaction	High	Low	High	Low
Resilience	High	Low	High	Low
Optimism	High	Low	High	Low
Gratitude	High	Low	High	Low
Forgiveness	High	Low	High	Low
Empathy	High	Low	High	Low
Compassion	High	Low	High	Low
Kindness	High	Low	High	Low
Generosity	High	Low	High	Low
Patience	High	Low	High	Low
Self-control	High	Low	High	Low
Emotional Stability	High	Low	High	Low
Psychological Well-being	High	Low	High	Low
Life Purpose	High	Low	High	Low
Meaning in Life	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low
Existential Well-being	High	Low	High	Low
Transcendental Well-being	High	Low	High	Low
Humanistic Well-being	High	Low	High	Low

Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr Val
1 5 10 15

<213> Measles virus

Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
1 5 10 15

<213> Measles virus

Ile Ser Met Thr Glu Ile Arg Thr Val Ile Val Thr Arg Met Glu Thr
1 5 10 15

<213> Measles virus

Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu Glu Gly
1 5 10 15

<213> Measles virus

Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
1 5 10 15

<211> 19

<210> 47
<211> 19
<212> PRT
<213> Measles virus

<400> 47
Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly
1 5 10 15
Ile Leu Phe

<210> 48
<211> 19
<212> PRT
<213> Measles virus

<400> 48
Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr
1 5 10 15
Ile Leu Phe

<210> 49
<211> 19
<212> PRT
<213> Measles virus

<400> 49
Ile Ser Met Ser Glu Met Lys Gly Val Ile Val His Lys Met Glu Gly
1 5 10 15
Met Leu Phe

<210> 50
<211> 19
<212> PRT
<213> Measles virus

<400> 50
Ile Ser Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu Glu Thr
1 5 10 15
Val Leu Phe

<210> 51
<211> 19
<212> PRT
<213> Measles virus

<400> 51
Ile Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr

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<400> 57
Lys Lys Lys Val Arg Val Val Thr Lys Val Val Thr Val Pro Ile Ser
1 5 10 15

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<210> 58
<211> 18
<212> PRT
<213> Hepatitis B virus
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<400> 58
Lys Lys Lys Phe Phe Phe Phe Thr Lys Phe Phe Thr Phe Pro Val Ser
1 5 10 15

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<210> 59
<211> 18
<212> PRT
<213> Hepatitis B virus
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<400> 59
Lys Lys Lys Leu Phe Leu Leu Thr Lys Leu Leu Thr Leu Pro Phe Ser
1 5 10 15

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<210> 60
<211> 18
<212> PRT
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<400> 60
Lys Lys Lys Ile Ile Thr Ile Thr Arg Ile Ile Thr Ile Ile Thr Thr
1 5 10 15

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<210> 61
<211> 17
<212> PRT
<213> Hepatitis B virus
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[illegible]

Ile

<211> 18

<213> Hepatitis B virus

Lys Lys Lys Met Met Thr Met Thr Arg Met Ile Thr Met Ile Thr Thr
1 5 10 15

Ile Asp

<211> 16

<213> Hepatitis B virus

Phe Ile Thr Met Asp Thr Lys Phe Leu Leu Ala Ser Thr His Ile Leu
1 5 10 15

<211> 19

<213> Hepatitis B virus

Lys Lys Lys Phe Ile Thr Met Asp Thr Lys Phe Leu Leu Ala Ser Thr
1 5 10 15

His Ile Leu

<211> 42

<213> Homo sapiens

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
20 25 30

Gly Leu Met Val Gly Gly Val Val Ile Ala
35 40

<210> 66

<211> 28
<212> PRT
<213> Homo sapiens

<400> 66
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
1 5 10 15
Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys
20 25

<210> 67
<211> 14
<212> PRT
<213> Homo sapiens

<400> 67
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His
1 5 10

<210> 68
<211> 12
<212> PRT
<213> Homo sapiens

<400> 68
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val
1 5 10

<210> 69
<211> 10
<212> PRT
<213> Homo sapiens

<400> 69
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr
1 5 10

<210> 70
<211> 45
<212> PRT
<213> Hepatitis B virus

<400> 70
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
1 5 10 15
Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Gly Phe Phe
20 25 30

Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
35 40 45

<210> 71
<211> 30
<212> PRT

<213> Measles virus

<400> 71

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Lys Ile Ser Ile Thr Glu
1 5 10 15

Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
20 25 30

<210> 72

<211> 32

<212> PRT

<213> Measles virus

<400> 72

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val Lys Ile Ser Ile
1 5 10 15

Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
20 25 30

<210> 73

<211> 34

<212> PRT

<213> Measles virus

<400> 73

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
1 5 10 15

Ser Ile Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile
20 25 30

Leu Phe

<210> 74

<211> 48

<212> PRT

<213> Measles virus

<400> 74

Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
1 5 10 15

Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Lys Ile Ser Ile
20 25 30

Thr Glu Ile Lys Gly Val Ile Val His Arg Ile Glu Thr Ile Leu Phe
35 40 45

<210> 75
<211> 34
<212> PRT
<213> Measles virus

<400> 75
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
1 5 10 15
Ser Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile Glu Gly Ile
20 25 30
Leu Phe

<210> 76
<211> 34
<212> PRT
<213> Measles virus

<400> 76
Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Lys Ile
1 5 10 15
Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile Glu Thr Ile
20 25 30
Leu Phe

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